



The Fifth Grade Field Trip

Vocabulary Terms used at the Foundry

Mold/Wax Room

Mold- the hollow form created around an object from which duplicate patterns can be made.

Rubber Mold- silicone rubber, inner layer to capture surface texture and detail.

Mother Mold- plaster outer layer to hold the rubber in shape of original object.

Wax Pattern- wax copy of the original object produced from the mold.

Foundry/Investment Room

Lost Wax- Use of wax pattern created from a mold of an original object. The wax pattern is invested and then melted out.

Investment Casting- process that uses a wax or thermoplastic pattern and is surrounded in a refractory slurry to form a mold. Once dry, the wax or plastic is melted out and the mold is formed. Molten metal is then poured in to fill the area/cavity that was previously filled with wax.

Gating- channels that allow the molten metal to enter the mold cavity.

Burn Out- process by which the wax pattern is melted out of the investment mold by super heating the mold in a kiln (very high temperature oven). The resulting void is what the bronze is poured into.

Crucible- vessel used to heat and liquefy the metal, for pouring into the mold.

Bronze- primary metal alloy cast at the Walla Walla Foundry. Common metal used for casting sculptures.

Metal Shop

Welding- fusing of 2 pieces of metal using heat and filler metal. The method by which the bronze sculptures are assembled.

Chasing- finishing of cast bronze, to remove welding seams and imperfections in the metal, using air tools and grinders.

Patina

Patination- coloration on the surface of metal, formed naturally due to exposure or artificially produced with acids, oils, and waxes.